



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,178	05/22/2006	Kaoru Yokota	2006_0680A	4029
52349 7590 11/26/2010 WENDEROTH, LIND & PONACK L.L.P. 1030 15th Street, N.W. Suite 400 East Washington, DC 20005-1503				
EXAMINER				
ZUNIGA, JACKIE				
ART UNIT		PAPER NUMBER		
2469				
NOTIFICATION DATE		DELIVERY MODE		
11/26/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ddalecki@wenderoth.com

coa@wenderoth.com

### Office Action Summary

**Application No.**

10/580,178

**Applicant(s)**

YOKOTA ET AL.

**Examiner**

JACKIE ZUNIGA

**Art Unit**

2469

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 September 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8, 10 and 13-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10 and 13-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-506)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

#### **DETAILED ACTION**

1. Claims 1-8, 10, 13-15 are presented for examination.
2. Claims 1 and 15 are amended.

#### ***Allowable Subject Matter***

3. As previously mentioned on the Non-Final Office action mailed on 06/25/2010, Claim 13 is allowed. The Examiner recommends incorporating allowable subject matter from claim 13 into claims 1, 14, and 15.

#### ***Response to Arguments***

4. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.
5. The rejection to claims 1-8, 10, 13, and 15 under 35 U.S.C. 101 has been withdrawn based on Applicant's amendment.

#### ***Claim Objections***

6. Claims 14 and 15 are objected to because of the following informalities: The claims disclose the limitation "...index information can be accessed from outside..."; the phrase "can be" renders the claims indefinite since it is unclear whether or not the index information is accessed from the outside. Examiner recommends changing the claims to "index information is accessed from the outside" .

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1-8, 10, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakano et al. (hereinafter Nakano), U.S. Publication No. 2003/0081792, as cited by applicant in IDS, in view of Kocher et al., (hereinafter Kocher), U.S. Publication No. 2004/0133794.**

9. **As per claim 1**, Nakano discloses a content reproduction apparatus which reproduces a digital content [fig. 1, paragraph 0002, 0005, digital work system 10, for performing reproduction of content], the content reproducing apparatus comprising

A secret information storage unit [fig. 1, key information storage unit 301] operable to store a device key corresponding to the content reproduction apparatus, and the device key being stored in the secret information storage unit such that the device key cannot be accessed from outside of the content reproduction apparatus [fig. 1, 8, 10, paragraphs 0009, 0026, 0191, 0195, 0227, key information storage unit 301 for storing device key information, the device key may only be accessed by a user if purchased with a user apparatus];

A cryptographic processing unit operable to decrypt an encrypted digital content, corresponding to the digital content, the encrypted digital content being encrypted using the device key stored in the secret information storage unit [fig. 8, 10, paragraphs 0206-0211, encryption unit 304 receives media key information and reads content from the content storage unit, next the encryption unit 304, encrypts the read content with the use of the received media key];

An index information storage unit [fig. 8, key information storage unit 301] operable to store index information, the index information indicating the device key stored in the secret information storage unit such that the index information can be accessed from outside of the content reproduction apparatus [fig. 8, paragraphs 0193-0198, based on the ID information stored by the recording apparatus, the position of the encrypted media key and the device key that is to be used may be determined];

Nakano discloses an index information output unit operable to output, only the index information [fig. 2, 9, paragraph 0179, 0193, 0213-0216, based on the ID information in the reproduction apparatus 400a, analyze the header information stored in the recording medium 500c to specify the position of the encrypted media key to be decrypted and the device key to be used], but he does not explicitly disclose the content reproduction apparatus comprising memory, wherein the memory is operable to store a device key; and further comprising:

A video output unit operable to connect to a display apparatus that is distinct from the content reproduction apparatus;

An instruction receiving unit operable to receive, from outside of the content reproduction apparatus, an instruction for outputting the index information from the index information storage unit;

A video processing unit operable to convert the index information stored in the index information storage unit into a data format that is displayable on a screen of the display apparatus; and

Wherein the index information output unit causing the display apparatus to display the index information converted by the video processing unit, the index information converted by the video processing unit being output to the display apparatus based in the instruction received by the instruction receiving unit.

However Kocher teaches the content reproduction apparatus comprising memory, wherein the memory is operable to store a device key [paragraph 0143, keys including secret keys stored in the player which may optionally be stored in internal tamper resistant chips with cryptographic capabilities and internal memory];

A video output unit operable to connect to a display apparatus that is distinct from the content reproduction apparatus [fig. 2, 3, paragraphs 0053, 0145, output interface; player for outputting data to the user; transferring the data to one or more physically-separate devices, such as audio speakers or video displays];

An instruction receiving unit operable to receive, from outside of the content reproduction apparatus, an instruction for outputting the index information from the index information storage unit [paragraphs 0037, 0142, 0143, data or media input

interface (optical disc drive), load s series of processing commands and begins executing the commands using the interpreter; index selecting from among keys];

A video processing unit operable to convert the index information stored in the index information storage unit into a data format that is displayable on a screen of the display apparatus [paragraphs 0143, 0145, data ready to be outputted to the user, data will be transformed if appropriate and then presented; presentation may include transferring the data to one or more physically separate devices, such as audio speakers or video displays];

Wherein the index information output unit causing the display apparatus to display the index information converted by the video processing unit, the index information converted by the video processing unit being output to the display apparatus based in the instruction received by the instruction receiving unit [fig. 2, paragraphs 0143, 0145, output interface outputting data to the destination device; data ready to be outputted to the user, data will be transformed if appropriate and then presented; presentation may include transferring the data to one or more physically separate devices, such as audio speakers or video displays].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the apparatus described in Nakano by including means for displaying information based on instructions from a user as taught by Kocher because it would provide the Nakano's apparatus with the enhanced capability of providing flexible and renewable content protection across a wide variety of platforms [Kocher, paragraphs 0036, 0038].

10. **As per claim 2**, Nakano discloses the content reproduction apparatus according to Claim 1,

Wherein the index information stored in the index information storage unit is encrypted according to a predetermined cryptographic method [fig. 2, paragraph 0009, 0026, 0176, 0178, key information generation unit 107 generates an encrypted media key];

Wherein the index information output unit includes a decryption unit operable to decrypt, based on the instruction, the encrypted index information stored in the index information storage unit according to the predetermined cryptographic method [paragraphs 0026, 0179, a decryption unit operable to generate a media key from an encrypted media key];

An output unit operable to output the index information decrypted by the decryption unit [fig. 8, paragraph 0204, decryption unit 302 outputs the generated decrypted media key].

Nakano does not explicitly disclose the content reproduction apparatus comprising a display apparatus.

However Kocher teaches a display apparatus [fig. 2, paragraphs 0143, 0145, data ready to be outputted to the user, data will be transformed if appropriate and then presented; presentation may include transferring the data to one or more physically separate devices, such as audio speakers or video displays].



It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the apparatus described in Nakano by including means for displaying information based on instructions from a user as taught by Kocher because it would provide the Nakano's apparatus with the enhanced capability of providing flexible and renewable content protection across a wide variety of platforms [Kocher, paragraphs 0036, 0038].

11. **As per claim 3**, Nakano discloses the content reproduction apparatus according to Claim 1,

Wherein the index information stored in the index information storage unit is encrypted according to a predetermined cryptographic method [fig. 2, paragraph 0009, 0026, 0176, 0178, key information generation unit 107 generates an encrypted media key];

Wherein the index information output unit outputs, based on the instruction, the encrypted index information stored in the index information storage unit [fig. 2, paragraph 0179, key information generation unit 107 outputs the generated encrypted media key].

Nakano discloses a device key assignment unit 103 for outputting device keys and ID information to each user apparatus [paragraphs 0051, 0127], but he does not explicitly disclose the content reproduction apparatus comprising a display apparatus.

However Kocher teaches a display apparatus [fig. 2, paragraphs 0143, 0145, data ready to be outputted to the user, data will be transformed if appropriate and then

presented; presentation may include transferring the data to one or more physically separate devices, such as audio speakers or video displays].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the apparatus described in Nakano by including means for displaying information based on instructions from a user as taught by Kocher because it would provide the Nakano's apparatus with the enhanced capability of providing flexible and renewable content protection across a wide variety of platforms [Kocher, paragraphs 0036, 0038].

12. **As per claim 4**, Nakano discloses the content reproduction apparatus according to Claim 1, but he does not explicitly disclose an authentication data storage unit operable to store authentication data that is obtained by performing a predetermined conversion on the index information.

However Kocher teaches an authentication data storage unit operable to hold authentication data that is obtained by performing a predetermined conversion on the index information [paragraphs 0061, 0143].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the apparatus described in Nakano by including an authentication mechanism as taught by Kocher because it would provide the Nakano's apparatus with the enhanced capability of providing flexible and renewable content protection across a wide variety of platforms [Kocher, paragraphs 0036, 0038].

13. **As per claim 5**, Nakano discloses the content reproduction apparatus according to Claim 1,

Wherein the index information output unit outputs the index information stored in the index information storage unit [fig. 2, paragraph 0179, key information generation unit 107 outputs the generated encrypted media key].

Nakano discloses a device key assignment unit 103 for outputting device keys and ID information to each user apparatus [paragraphs 0051, 0127], but he does not explicitly disclose a display apparatus.

However Kocher teaches a display apparatus [fig. 2, paragraphs 0143, 0145, data ready to be outputted to the user, data will be transformed if appropriate and then presented; presentation may include transferring the data to one or more physically separate devices, such as audio speakers or video displays].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the apparatus described in Nakano by including means for displaying information based on instructions from a user as taught by Kocher because it would provide the Nakano's apparatus with the enhanced capability of providing flexible and renewable content protection across a wide variety of platforms [Kocher, paragraphs 0036, 0038].

14. **As per claim 6**, Nakano discloses the content reproduction apparatus according to Claim 5,

Wherein on the recording medium, a unique identification number is recorded [paragraph 0009, organization assigns recording apparatus with a device key identification number];

Wherein the instruction receiving unit reads the program and the identification number from the removable recording medium on which the program is recorded [paragraphs 0009, 0025, 0099, 0595, recording medium is loaded and the apparatus extracts encrypted media key corresponding to the key identification number, and the key management program recorded to assist the key management apparatus achieve its function];

Wherein the index information output unit outputs, the index information stored in the index information storage unit, the index information being output by executing the read program only when the identification number satisfies a predetermined condition [paragraph 0009, apparatus will extract the encrypted media key corresponding to the identification number assigned to the apparatus].

Nakano discloses a device key assignment unit 103 for outputting device keys and ID information to each user apparatus [paragraphs 0051, 0127], but he does not explicitly disclose a display apparatus.

However Kocher teaches a display apparatus [fig. 2, paragraphs 0143, 0145, data ready to be outputted to the user, data will be transformed if appropriate and then presented; presentation may include transferring the data to one or more physically separate devices, such as audio speakers or video displays].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the apparatus described in Nakano by including means for displaying information based on instructions from a user as taught by Kocher because it would provide the Nakano's apparatus with the enhanced capability of providing flexible and renewable content protection across a wide variety of platforms [Kocher, paragraphs 0036, 0038].

15. **As per claim 7**, Nakano discloses the content reproduction apparatus according to Claim 1, but he does not explicitly disclose wherein the instruction receiving unit is operable to receive the instruction from a communication terminal via a computer network;

However Kocher teaches wherein the instruction receiving unit is operable to receive the instruction from a communication terminal via a computer network [fig. 3, paragraphs 0016, 0061, 0066, 0134, CD or via the Internet].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the apparatus described in Nakano by including means for displaying information based on instructions from a user as taught by Kocher because it would provide the Nakano's apparatus with the enhanced capability of providing flexible and renewable content protection across a wide variety of platforms [Kocher, paragraphs 0036, 0038].

16. **As per claim 8**, Nakano discloses the content reproduction apparatus according to Claim 1, but he does not explicitly disclose wherein the instruction receiving unit is operable to receive the instruction from a debug apparatus connected to the content reproduction apparatus.

However Nakano discloses a need for a system that will efficiently determine key assignment for the user apparatus for the content reproduction [fig. 2, 3, paragraphs 0050, cryptographic oracles].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the apparatus described in Nakano by including debug terminals as taught by Kocher because it would provide the Nakano's apparatus with the enhanced capability of providing flexible and renewable content protection across a wide variety of platforms [Kocher, paragraphs 0036, 0038].

17. **As per claim 10**, Nakano discloses the content reproduction apparatus according to Claim 1,

Wherein the index information stored in the index information storage unit is encrypted according to a predetermined cryptographic method [paragraph 0009, 0026, 0176, 0178, apparatus encrypts media keys using device keys to generate encrypted media keys];

Nakano discloses a device key assignment unit 103 for outputting device keys and ID information to each user apparatus [paragraphs 0051, 0127], but he does not explicitly disclose a display apparatus.

However Kocher teaches a display apparatus [fig. 2, paragraphs 0143, 0145, data ready to be outputted to the user, data will be transformed if appropriate and then presented; presentation may include transferring the data to one or more physically separate devices, such as audio speakers or video displays].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the apparatus described in Nakano by including means for displaying information based on instructions from a user as taught by Kocher because it would provide the Nakano's apparatus with the enhanced capability of providing flexible and renewable content protection across a wide variety of platforms [Kocher, paragraphs 0036, 0038].

18. **As per claim 14**, Nakano discloses a method for controlling a content reproduction apparatus [fig. 1, paragraph 0002, 0005, 0025, digital work system 10, for performing reproduction of content], the content reproduction apparatus storing a device key that corresponds to the content reproduction apparatus, the device key being stored in the content reproduction apparatus such that the device key cannot be accessed from outside of the content reproduction apparatus [fig. 1, 8, 10, paragraphs 0009, 0026, 0191, 0195, 0227, key information storage unit 301 for storing device key information, the device key may only be accessed by a user if purchased with a user apparatus], the content reproduction apparatus decrypting an encrypted digital content using the stored device key to reproduce a digital content, the content reproduction apparatus storing index information that indicates the stored device key [fig. 8, 10,

paragraphs 0206-0211, encryption unit 304 receives media key information and reads content from the content storage unit, next the encryption unit 304, encrypts the read content with the use of the received media key], and the index information being stored in the content reproduction apparatus such that the index information can be accessed from outside of the content reproduction apparatus [fig. 8, paragraphs 0193-0198, based on the ID information stored by the recording apparatus, the position of the encrypted media key and the device key that is to be used may be determined], the method comprising:

Nakano discloses outputting only the converted index information [fig. 2, 9, paragraph 0179, 0193, 0213-0216, based on the ID information in the reproduction apparatus 400a, analyze the header information stored in the recording medium 500c to specify the position of the encrypted media key to be decrypted and the device key to be used], but he does not explicitly disclose causing the display apparatus to display the index information converted by the video processing unit.

Receiving, from outside of the content reproduction apparatus, an instruction for outputting the index information from an index information storage unit of the content reproduction apparatus;

Converting the stored index information into a data format that is displayable on a screen of the display apparatus, the stored index information being converted based on the received instruction.

However Kocher teaches causing the display apparatus to display the index information converted by the video processing unit [fig. 2, paragraphs 0143, 0145,



output interface outputting data to the destination device; data ready to be outputted to the user, data will be transformed if appropriate and then presented; presentation may include transferring the data to one or more physically separate devices, such as audio speakers or video displays];

Receiving, from outside of the content reproduction apparatus, an instruction for outputting the index information from an index information storage unit of the content reproduction apparatus [paragraphs 0037, 0142, 0143, data or media input interface (optical disc drive), load s series of processing commands and begins executing the commands using the interpreter; index selecting from among keys];

Converting the stored index information into a data format that is displayable on a screen of the display apparatus, the stored index information being converted based on the received instruction [paragraphs 0143, 0145, data ready to be outputted to the user, data will be transformed if appropriate and then presented; presentation may include transferring the data to one or more physically separate devices, such as audio speakers or video displays].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the method described in Nakano by including means for displaying information based on instructions from a user as taught by Kocher because it would provide the Nakano's method with the enhanced capability of providing flexible and renewable content protection across a wide variety of platforms [Kocher, paragraphs 0036, 0038].

19. **As per claim 15**, Nakano discloses a non-transitory computer-readable recording medium having a program recorded thereon, the program being used in a content reproduction apparatus [fig. 1, paragraph 0002, 0005, 0025, digital work system 10, for performing reproduction of content], the content reproduction apparatus storing a device key that corresponds to the content reproduction apparatus, the device key being stored in the content reproduction apparatus such that the device key cannot be accessed from outside of the content reproduction apparatus [fig. 1, 8, 10, paragraphs 0009, 0026, 0191, 0195, 0227, key information storage unit 301 for storing device key information, the device key may only be accessed by a user if purchased with a user apparatus], the content reproduction apparatus decrypting an encrypted digital content using the stored device key to reproduce a digital content, the content reproduction apparatus storing index information that indicates the stored device key [fig. 8, 10, paragraphs 0206-0211, encryption unit 304 receives media key information and reads content from the content storage unit, next the encryption unit 304, encrypts the read content with the use of the received media key], and the index information being stored in the content reproduction apparatus such that the index information can be accessed from outside of the content reproduction apparatus [fig. 8, paragraphs 0193-0198, based on the ID information stored by the recording apparatus, the position of the encrypted media key and the device key that is to be used may be determined], and the program causing the content reproduction apparatus to execute a method comprising

Nakano discloses outputting only the converted index information [fig. 2, 9, paragraph 0179, 0193, 0213-0216, based on the ID information in the reproduction

apparatus 400a, analyze the header information stored in the recording medium 500c to specify the position of the encrypted media key to be decrypted and the device key to be used], but he does not explicitly disclose causing the display apparatus to display the index information converted by the video processing unit.

Receiving, from outside of the content reproduction apparatus, an instruction for outputting the index information from an index information storage unit of the content reproduction apparatus;

Converting the stored index information into a data format that is displayable on a screen of the display apparatus, the stored index information being converted based on the received instruction.

However Kocher teaches causing the display apparatus to display the index information converted by the video processing unit [fig. 2, paragraphs 0143, 0145, output interface outputting data to the destination device; data ready to be outputted to the user, data will be transformed if appropriate and then presented; presentation may include transferring the data to one or more physically separate devices, such as audio speakers or video displays];

Receiving, from outside of the content reproduction apparatus, an instruction for outputting the index information from an index information storage unit of the content reproduction apparatus [paragraphs 0037, 0142, 0143, data or media input interface (optical disc drive), load s series of processing commands and begins executing the commands using the interpreter; index selecting from among keys];

Converting the stored index information into a data format that is displayable on a screen of the display apparatus, the stored index information being converted based on the received instruction [paragraphs 0143, 0145, data ready to be outputted to the user, data will be transformed if appropriate and then presented; presentation may include transferring the data to one or more physically separate devices, such as audio speakers or video displays].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the method described in Nakano by including means for displaying information based on instructions from a user as taught by Kocher because it would provide the Nakano's method with the enhanced capability of providing flexible and renewable content protection across a wide variety of platforms [Kocher, paragraphs 0036, 0038].

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JACKIE ZUNIGA whose telephone number is (571)270-7194. The examiner can normally be reached on Monday - Friday 8:30 A.M to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ian Moore can be reached on (571)272-3085. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J.Z./

Examiner, Art Unit 2469

/Ian N. Moore/

Supervisory Patent Examiner, Art Unit 2469